

enlighten

THE BIMONTHLY NEWSLETTER OF THE DAYLIGHTING COLLABORATIVE

www.daylighting.org

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DAYLIGHTING
collaborative®

Thank you to the members who support the Daylighting Collaborative's mission of **lighting every building using the sky**:

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LOOKING UP...daylighting spaces using skylights

By Mark Mitchell, *Marketing Manager for Major Industries, Inc.*

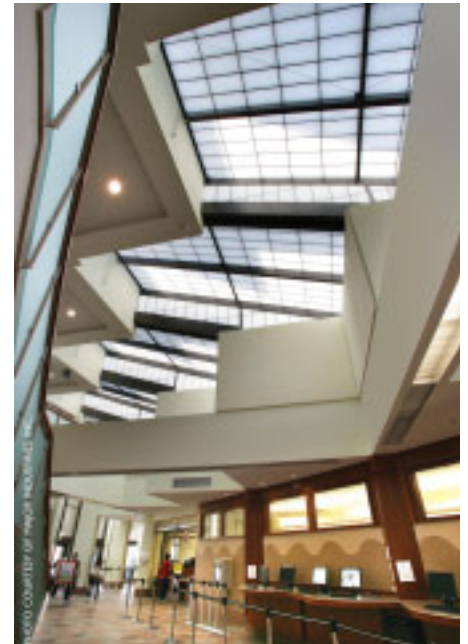
Using natural light in buildings simply makes sense. However, adding daylight to interior spaces poses a challenge. It is difficult to bring adequate illumination 30- to 40-feet inside the perimeter of a building from traditional windows and curtainwalls, even with the assistance of light shelves. Because of this, spaces close to exterior walls are often well lit while spaces deeper in the building are illuminated with artificial lighting even during peak daylight hours.

Skylights are a versatile and economical way to introduce daylight into hard-to-reach spaces. With proper planning and design, they also have the ability to transform a space into a light-filled and welcoming environment.

THE TRUTH ABOUT SKYLIGHTS

Skylights tend to get a bad rap when it comes to longevity and performance, but the truth is that a well-designed, properly installed skylight can transform interior spaces into light-filled environments. Poorly designed and badly installed skylights are what give skylights the bad rap. They can leak—in much the same way that a poorly installed roofing system can leak.

So it is important to choose daylighting products wisely, looking closely at features like built-in water management (weep holes and gutters) in the framing system to direct any condensation out of the building, and high-performance sealants and gaskets to stop the weather from reaching interior spaces. Excessive interior humidity or wide temperature fluctuations can also affect a skylight, making it even more



De Anza Community College, Cupertino CA

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MEMBER SPOTLIGHT



The Daylighting Collaborative had a booth at LIGHTFAIR International on May 10–11, 2010 at the Las Vegas Convention Center in Las Vegas, Nevada. LightLouver LLC was honored with the Judges Citation Award, one of LFI's Innovation Awards recognizing the best in innovative design and thinking. [Download the press release \(PDF\).](#)

DAYLIGHTING COLLABORATIVE MEMBERSHIP

Join the Daylighting Collaborative and connect with the design and construction professionals who need your products and services to deliver sustainable, energy efficient, carbon neutral buildings. Membership will connect you to more than 10,000 highly motivated and qualified customers who are looking for products and technical solutions. Align your organization with an objective, nationally-known resource for design professionals who want to incorporate daylighting into their designs. For more information, contact Peggy Heisch at 608.238.8276 x139 or pheisch@ecw.org.

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critical to incorporate integrated water management. If you're unsure if a system features integrated water management, ask your daylighting manufacturer.

Weight is also an important factor when considering a skylight system. There are a variety of glazing options available in the market today, each with their own pros and cons. Keep in mind, however, that while traditional glass systems are often the longest lasting, they are also extremely heavy and frequently require additional, and sometimes costly, structural support.

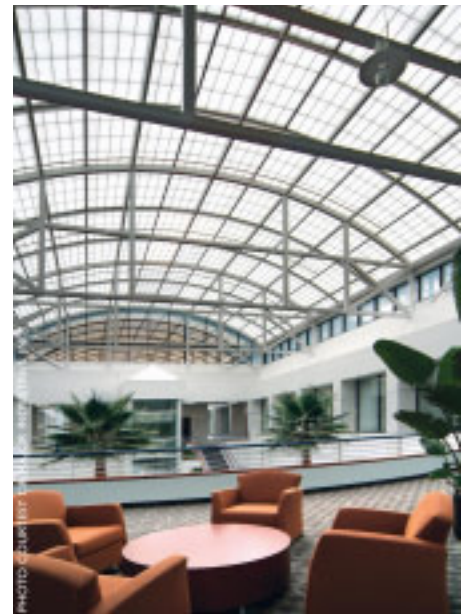
Lightweight glazing options, like translucent fiberglass reinforced panel systems, are a cost-effective way to add daylighting with many of the benefits of a glass skylight. Their weight—up to three times less than a traditional glass system—make them a good fit for both new and retrofit projects, and their lower cost means a faster return on the initial investment.

Skylights have also received negative press for causing hot-spots and glare, both of which can distract building occupants and make them uncomfortable. While direct sunlight is not necessarily a serious problem in transitional areas like atriums, lobbies and hallways where occupants are moving through quickly, it can be an issue for assembly lines, workstations and office areas where electronic devices are used or where precise vision is vital. In these types of areas, translucent panel systems or coated glass is critical for occupants' optimal use of the space.

Choosing the right glazing option can also add impact to the overall design of a building. Transparent glazing, for instance, introduces the bright blue of a clear daytime sky and offers the opportunity to bathe surrounding walls or the skylight's framing in intense contrasting colors. Translucent FRP panel systems offer a Japanese-style shoji grid pattern that can highlight architectural details and blends well with both traditional and modern aesthetics. Mixed-glazing systems—often consisting of translucent and transparent glazing—allow for some built-in light control while still providing views of the sky.

DESIGN FLEXIBILITY AND FUNCTIONALITY

Whether you're looking for the eye-catching beauty of a complex polygon skylight or the consistency of light that a simple row of pyramid skylights can provide, sky-



Gen-Probe Phase II, San Diego, CA

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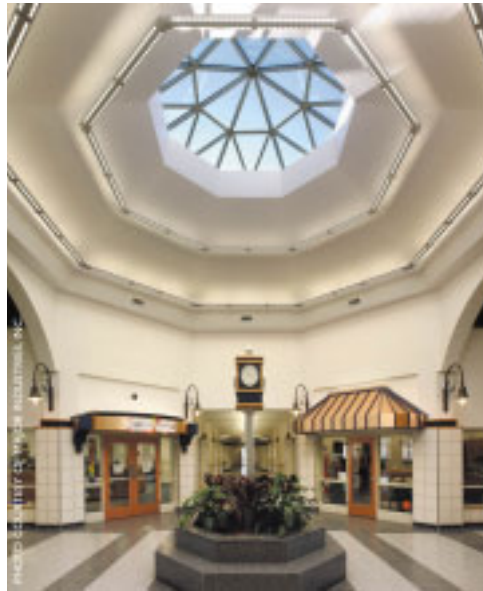
NEW MEMBER



The Daylighting Collaborative welcomes a new member!

Lutron Electronic's founder, Joel Spira, invented the first solid-state electronic dimmer in 1961. Today, more than 45 years later, the company is still devoted to controlling lighting, offering more than 15,000 products around the globe, from simple-to-install single light dimmers to sophisticated dimming systems that orchestrate a home's, or building's total lighting environment as well as automated shade and drapery control systems. Lutron holds over 2,700 worldwide patents. In addition to the solid-state dimmer, Lutron innovations also include the first electronic dimming ballast for fluorescent lights and the first self-contained preset lighting control system.

We're grateful to all our members for their generous support and collaboration in developing and delivering the resources the building design community needs to light every building using the sky.



DC Everest Middle School, Schofield, WI

lights are a flexible way to maximize the amount of daylight that's available to a space.

Because of their versatility, skylights are an elegant and functional way to define and enhance architectural focal points throughout a building's design. Consider echoing a geometric pattern from the skylight's framing system in the finished flooring below for an eye-catching visual effect. Repeating a skylight's shape in ceiling details can also help tie daylighting elements to the rest of the space.

Color also plays an important role in the overall effect a skylight can have on a space. Making creative use of finish colors allows you to easily tie in a company logo or a school's team colors for a unique and personalized effect, or tie in a wall color for a more uniform look.

Placement of the skylight within the building is perhaps the most important consideration in order to captivate occupants and provide an architectural focal point. People enjoy having access to natural light during daytime hours, and are drawn to naturally lit locations as they provide a bright, lively and welcoming place to meet. When placed in an area where hallways converge to create a common area, a skylight offers a welcome break from dark, enclosed spaces, and creates a natural gathering area for people to converse. When a space needs a design boost, an ornately structured dome or pyramid skylight becomes a focal point, encouraging occupants to pause and admire both the skylight and the surrounding architectural elements.

MAKING THE RIGHT CHOICE

The next time you're thinking of incorporating daylighting into a project, consider taking advantage of the flexibility of skylights. As an architectural design tool, custom designed skylights are often limited only by your imagination. Properly designed and installed skylights are a dependable, cost-effective and beneficial way to use energy-saving natural light. ■

Mark Mitchell is the Marketing Manager for Major Industries, Inc., a manufacturer of skylights and translucent curtainwall. Major Industries, Inc., 7120 Stewart Ave, Wausau, WI 54401, 888.759.2678, www.majorskylights.com